Status of Aura-Sponsored Instruments for Scientist/Teacher/Student Partnerships

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Aura Science Team Meeting

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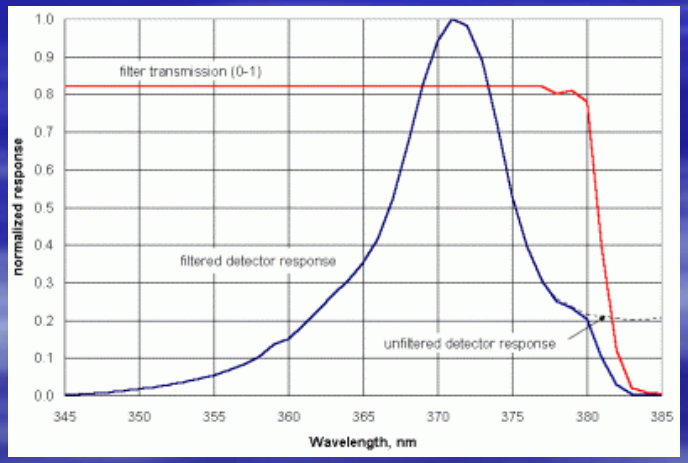
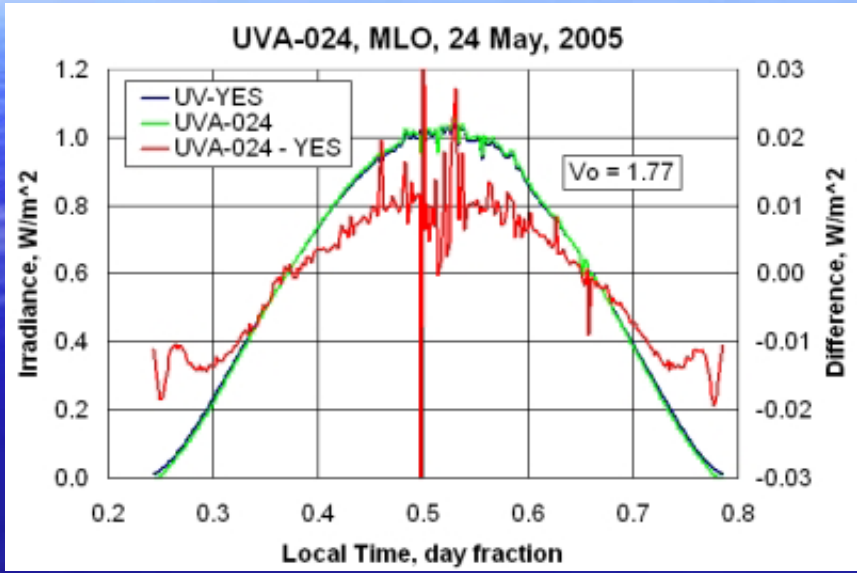
Status

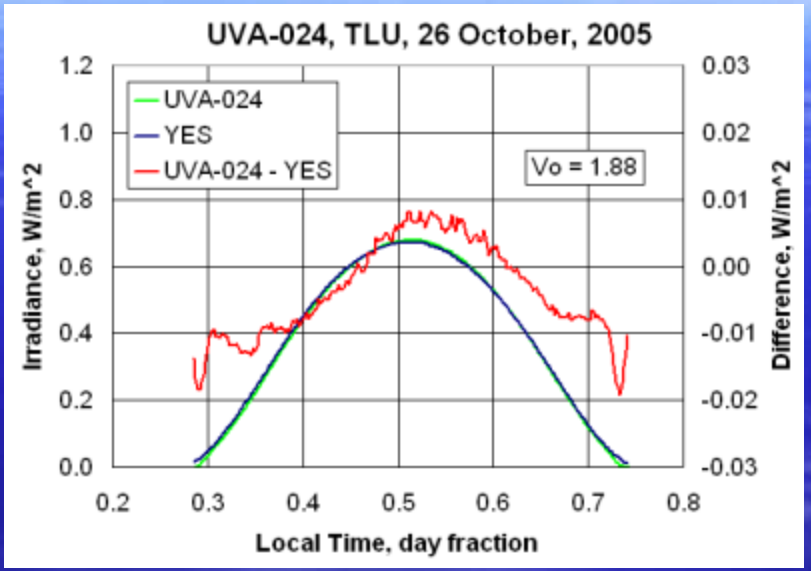
- The GLOBE Program is no longer actively supporting *any* atmosphere protocols, including aerosols, water vapor, and UV-A.
- Meeting in late August with GSFC Aerospace Education Specialists (work with NASA Explorer and other schools).
- Workshop in August under NOAA sponsorship for student/teacher aerosol and pyranometer measurements in support of TexAQS/GoMACCS field campaign.
- Ongoing activity to calibrate UV-A radiometer against GSFC UV shadowband instrument, using the 368nm channel.

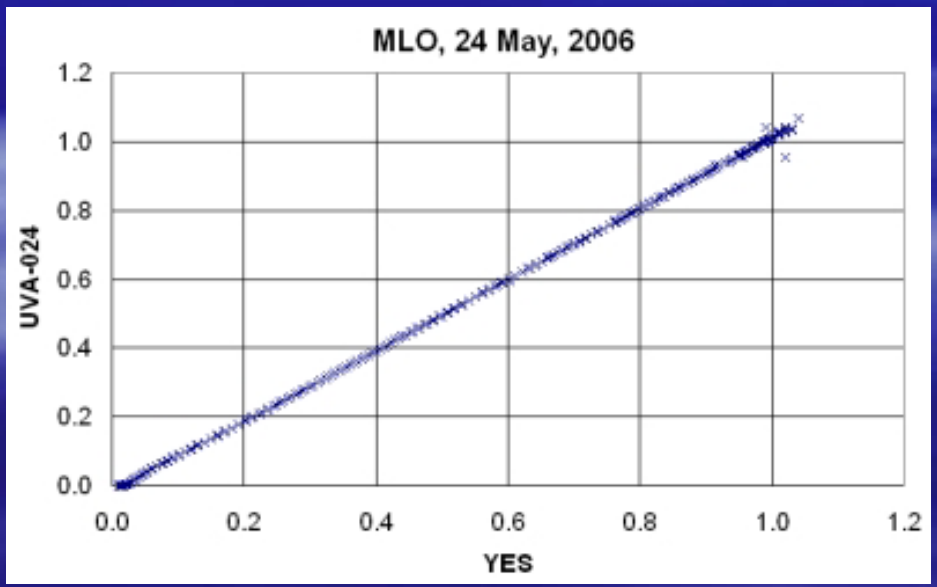
UV-A Radiometer



Calibrations at MLO and TLU



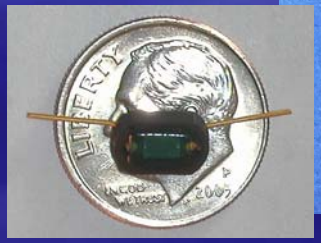




Pyranometers

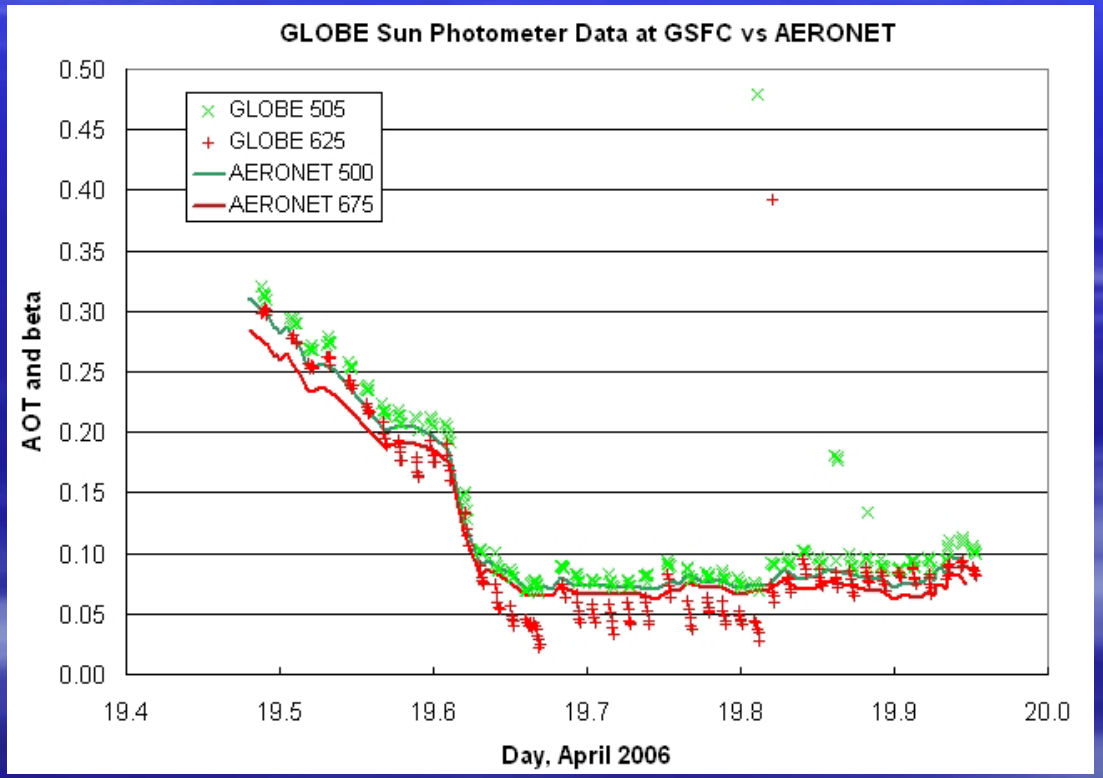
These instruments can be built for less than $20, and provide the radiometry equivalent of sun photometer kits. They can be calibrated against commercial instruments and read “manually” or data logged.

Components: small silicon solar cell, Teflon diffuser, bubble level.



Sun Photometer Calibrations at GSFC

GLOBE sun photometer independently calibrated from MLO reference instrument.



A Milestone for School-Based Sun Photometry at KNMI

KNMI is expanding its aerosol ground validation measurements. In addition to providing its own calibrations, KNMI will now start building its own sun photometers, using components supplied by the Institute for Earth Science Research and Education. (This ensures compatibility with earlier instruments.)